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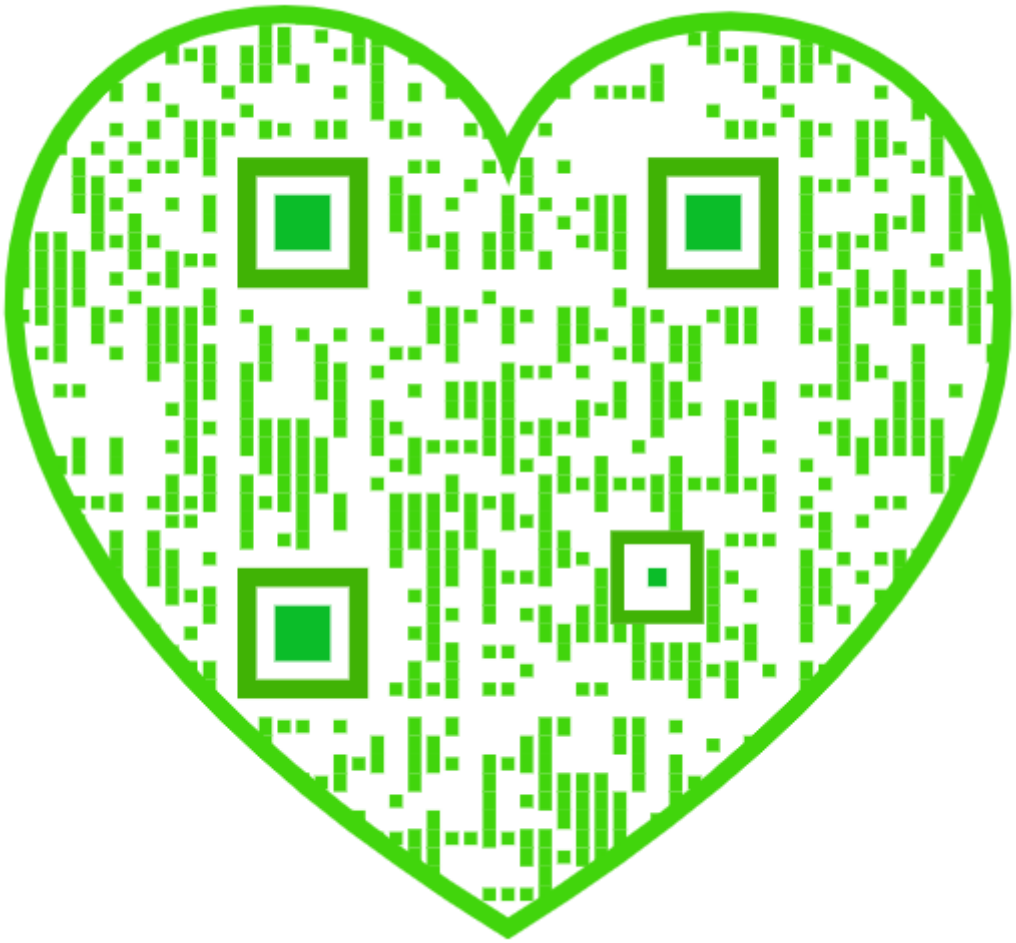
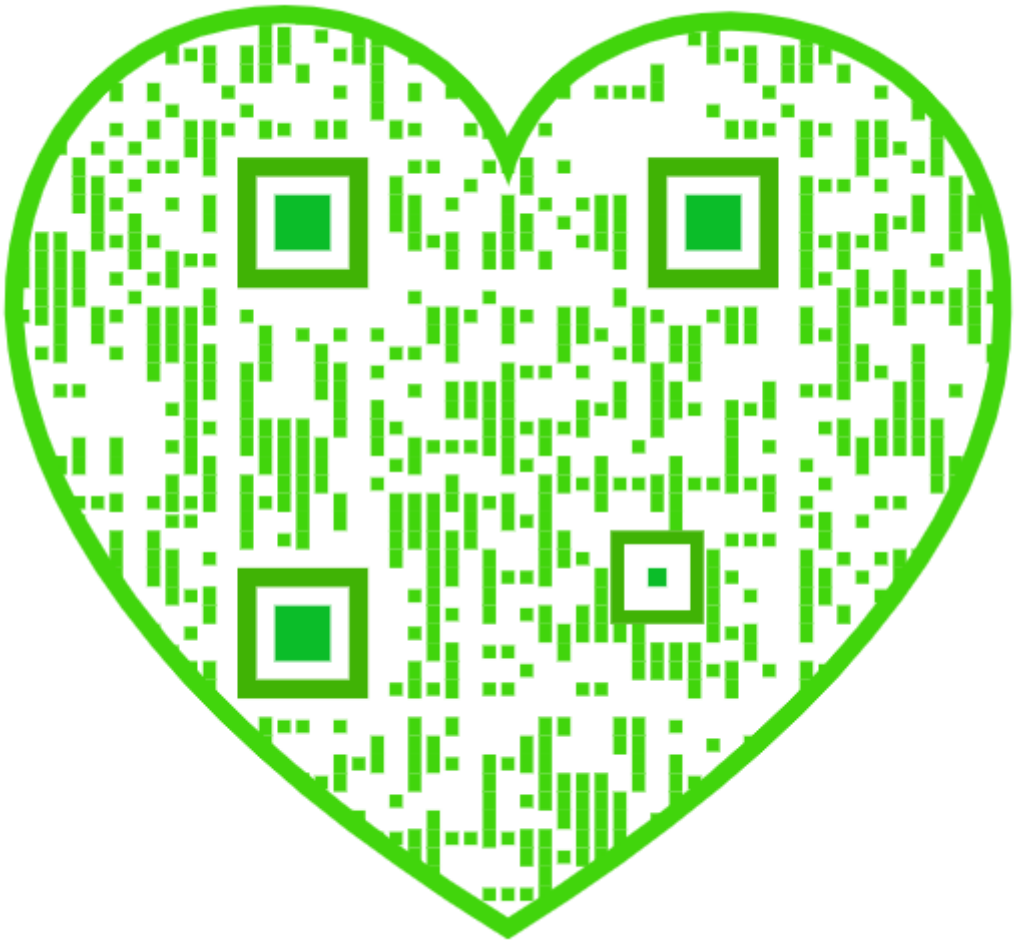




TRADITIONS™

PERFORMANCE FIREARMS

LOADING, SHOOTING & CARE INSTRUCTIONS

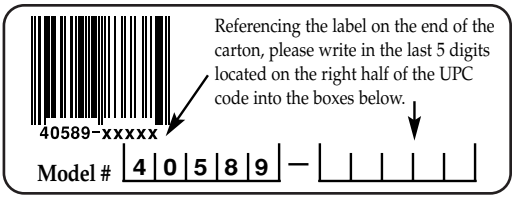
Limited Lifetime Warranty

IMPORTANT!

READ, UNDERSTAND AND BE WILLING TO FOLLOW THE INFORMATION IN THIS BOOKLET BEFORE LOADING OR FIRING YOUR MUZZLELOADER

A copy of this booklet must accompany your Traditions™ muzzleloader. If this muzzleloader is sold or given to another person be certain to give this booklet to the new owner. Additional copies are free and are available from Traditions™ upon request.

PREFERRED CUSTOMER WARRANTY REGISTRATION


40589-xxxxx
Referencing the label on the end of the carton, please write in the last 5 digits located on the right half of the UPC code into the boxes below.
Model # 4 0 5 8 9 –

Serial Number _____

Name_____

Street_____

City _____

State_____ Zip Code _____

Purchased From:

Name_____

Street_____

City _____

State_____ Zip Code _____

Please answer the following questions so that we can provide you with other new and innovative products in the future.

1. Is this your first time purchasing a muzzleloader? ❑ yes ❑ no
2. What is your age? ❑ under 18 ❑ 18-24 ❑ 50+
   ❑ 25-30 ❑ 35-49
3. What influenced you to purchase a Traditions Products
   ❑ Brand Reputation ❑ Previous Traditions products
   ❑ Recommended by Dealer ❑ Recommended by Friend
   ❑ Magazine Article ❑ Internet ❑ Magazine Advertisement
4. What magazines do you read?_____ _____

   _____ _____ _____
5. What features or qualities do you like about Traditions?
   ❑ Price ❑ Appearance ❑ Durability ❑ Availability ❑ Durability
6. What other brands did you consider? _____

   Why did you choose Traditions? _____

Note: *This card must be returned within 15 days of purchase or receipt to validate your limited one year warranty. Complete all information above and mail to:*

TRADITIONS PERFORMANCE FIREARMS
P.O. Box 776 • 1375 Boston Post Road
Old Saybrook, CT 06475-0776
Phone: (860)-388-4656
Fax: (860)-388-4657
e-mail: trad@ct2.nai.net
www.traditionsmuzzle.com

RECOMMENDED LOADS

Round Ball Projectiles

	Calibur	Round Ball	Patch Thickness	Black Powder Charge* Most Accurate grains	Most Accurate granulation	Maximum grains	Maximum granulation
Pistol	.32	.310	.012 .015	10-12	3F	20	3F
	.45	.440	.015	15-20	3F	35	3F
	.50	.490	.015	20-25	3F	45	3F
Rifle	.32	.310	.012 .015	10	3F	25	3F
	.36	.350	.015	40-50 35-45	2F 3F	70 65	2F 3F
	.45	.440	.015	46-70 40-65	2F 3F	100 95	2F 3F
	.50	.490	.015	50-75 45-70	2F 3F	110 105	2F 3F
	.54	.530	.015	55-80 50-75	2F 3F	125 120	2F 3F
	.58	.562	.015	60-85 55-80	2F 3F	135 130	2F 3F
Flintlock Pan					4F		

Conical Projectiles

Conical projectiles must be loaded without patches. If they are not purchased prelubricated, they must be greased with Traditions™ WonderLube or any commercial black powder bullet lube.
The most accurate load for a conical projectile is usually 5 to 10 grains above those for round balls. Maximum powder loads* for these projectiles in each caliber are identical to those noted above for round balls.
Conical projectiles must fit tightly. {*See Recommended Loads*):

*Commercial grade black powder designed for muzzleloaders should be used. The only other propellant which may be used in Traditions™ percussion rifles is Pyrodex® RS (Rifle and Shotgun Powder) and P (Pistol Powder) for use in Traditions™ percussion pistols. (Pyrodex®, is not recommended for flintlocks.) Pyrodex® produces approximately the same results as an equivalent volume of black powder. Therefore, the recommended charges apply to Pyrodex®, if a powder measure graduated in grains (as most powder measures are) is used.

PROPELLANTS

1. Cannons or very large-caliber rifles - we recommend 1 f/fg (coarsest granulation) black powder or Pyrodex®.
2. .45 to .58 caliber rifles - we recommend 2 f/ffg (coarse granulation) black powder, Pyrodex®. RS or Pyrodex®. Select.
3. Revolvers, pistols, and .38 caliber - 3 f/fffg (standard granulation) black powder, Pyrodex®. P.
4. Flintlock primer - 4 f/ffffg (finest granulation) black powder.

Store all propellants according to the manufacturer's instructions listed on each container. Local fire regulations should also be followed.

TRADITIONS™
PERFORMANCE FIREARMS

LIMITED LIFETIME MECHANICAL WARRANTY

Traditions™ will warrant this muzzleloading firearm (or parts if a kit) to be free of mechanical defects in materials or craftsmanship for the life of the firearm, while in the possession of the original owner. Traditions™ will repair or replace, at its option, product or parts which are returned at owner's expense to the Traditions™ Customer Service Department. A full explanation of the specific problem must accompany the returned item. Incidental and consequential damages are not covered by this warranty. Wood parts and corrosion damages are not warranted due to the inability of Traditions™ to control use and storage conditions.

This warranty shall be considered null and void if any of the following conditions are determined by the Traditions™ Customer Service Department.

1. Use of any propellant other than black powder or Pyrodex®.

2. Use of any powder charges in excess of those recommended in published Traditions™, shooters instructions.

3. Removal or movement by the owner or gunsmith of the breech plug or barrel bolster drum.

4. Modification of internal parts as they were shipped from the factory.

Shipping Address:

Traditions™ Performance Firearms
1375 Boston Post Rd. • P.O. Box 776
Old Saybrook, CT 06475-0076
Tel. 860-388-4656

ENJOYING SAFE MUZZLELOADING

Today more and more sportsmen are experiencing the excitement of muzzleloading. For both, hunting and target shooting, muzzleloading guns are enabling a modern generation to recapture and enjoy an important part of our nation's past.

Traditions'™ muzzleloading replicas are faithful in design to their eighteenth century ancestry and are manufactured to modern standards for safe and enjoyable shooting.

This manual contains instructions for the safe and careful handling of your Traditions™ firearm. It is your responsibility to learn and understand the functions, correct handling, and proper storage even before you remove your new Traditions™ firearm from the box. Follow these instructions completely. Take your time and have patience when educating and familiarizing yourself with the firearm or any new product. When properly handled and rules are followed, a muzzleloading firearm is safe and enjoyable to shoot. If, for some reason, you did not receive a instruction/safety booklet, please call Traditions™ at (800) 526-9556 and we will send you a free copy.

Remember, the performance of your firearm depends on its' correct maintenance and assembly. It is imperative that new and experienced gun owners read and familiarize themselves with the instruction/safety booklet provided because not every firearm is the same.

Your town clerk or state department of wildlife conservation can provide information on hunter safety courses offered in your area. Many courses include muzzleloading training for the beginning shooter.

Also, contact a local shooting club. Club members will be pleased to help introduce you to the enjoyable sport of shooting. A list of clubs in your area may be obtained from:

- **National Rifle Association**
  11250 Waples Mill Road • Fairfax, VA 22030
- **International Blackpowder Hunting Association**
  P.O. Box 1180, 570 Boxelder Road • Glenrock, WY 82637
- **National Muzzle Loading Rifle Association**
  P.O. Box 67 • Friendship, IN 47021

NOTE: If after reading the instructions in this manual, you are unwilling to accept the responsibilities involved in shooting a muzzleloading firearm, or feel uncertain of how to proceed safely, do not attempt to load or fire this firearm. Return the firearm to your retail dealer or contact Traditions™ directly.

Loading/Cleaning jag:
Attaches to the end of the ramrod to facilitate loading and cleaning. Each caliber requires an appropriately sized jag. Traditions™ ramrods are threaded to accept attachments with 10 x 32 threads.

Powder measure:
For precise measuring of the propellant volume.

Nipples:
Traditions™ nipples are of high grade steel. Traditions™ replacement nipples have M6x1 metric threads.

Nipple wrench:
No percussion shooter should be without this useful tool. Removes nipples easily for a thorough cleaning.

Powder horn or flask:
These are convenient for carrying your powder and for pouring it into a calibrated powder measure. Cleaning patches: All cotton patches are recomended.

Bore swab:
Convenient for cleaning, drying or oiling the bore. Screws into 10 x 32 threaded hole in ramrod.

Cleaning brush:
Bronze or nylon. Removes heavy residue from bore of barrel with 10 x 32 thread size will fit on a Traditions™ ramrod.

Patch Puller Worm:
A patch puller worm can be affixed to most ramrods and can be used to remove patches and balls from the bore.

Possibles bag:
These come in many forms, are usually made of suede or canvas duck and are useful for carrying accessories.

Contact Traditions™ for a free catalog to see muzzleloadings most complete line of firearms and accessories.

MUZZLELOADING ACCESSORIES

In order to participate fully in the sport, and to make shooting your new gun that much more enjoyable, you will want to consider the purchase of several accessories mentioned in this booklet. These can be obtained at most well stocked gun shops. A catalog of those accessories offered by Traditions™ is available from your local retail gun store or directly from Traditions™. These products are also shown on our web site www.traditionsmuzzle.com.

Quality shooting glasses and proper ear protection:
These are definite "musts" and are the most important accessories you can own. They should be used at all times. Ear protectors can be either simple ear plugs or the head set-type which fully cover the ears.

Flints:
Traditions™ flints are hand-knapped from material imported from the famous flint quarries in England.

Flintlock pan primer:
Dispenses priming powder into pan.

Shooting patches:
These are cut to size for different calibers and save trimming time. Material should be 100% cotton or linen.

Bore solvent:
Traditions™ bore solvent, diluted withwater as per instructions, makes an excellent cleaning solution. Undiluted, it serves as a great patch lube.

Ball starter:
Also known as a short starter or bullet seater,this is a very useful tool. Usually consists of a short shaft to drive the ball flush within the muzzle and a longer shaft for driving the ball further down the barrel.

EZUnloader:
$C0^2$ powered lets you clear load or obstruction from within the barrel.

Ball/Bullet puller:
Attaches to ramrod and screws into projectile for manual extraction from barrel.

Balls or Bullets:
These should be of the correct size (diameter) and of pure lead.

MUZZLELOADING 'MUSTS' FOR MUZZLELOADING SUCCESS

1. Read, understand and be willing to follow all instructions and warranty limitations outlined in this booklet before loading or whenever shooting your new

2. Always treat any firearm as if it were loaded.

3. Always wear proper quality eye and ear protection when loading, firing or cleaning any firearm.

4. Don't shoot until you are absolutely sure of your target and what is beyond it. Do not point your gun at anything you do not intend to shoot. Be mindful that this firearm has a range in excess of a half a mile and you are responsible for safety. Make sure you have a safe and secure backstop of proper thickness and density necessary to capture the projectiles.

5. Use only the proper grade of black powder or Pyrodex® in properly measured amounts. Be sure to reference the loading chart in this booklet *(Recommended Loads).*

6. Never use any amount of smokeless gun powder in your muzzleloader. Although, also black in color, smokeless powder is a very different chemical composition and it will produce dangerous pressures resulting in serious injury or death to yourself or bystanders and will damage your firearm.

7. Never smoke or permit others to smoke in the presence of black powder or Pyrodex®. Take care to guard against all potential ignition sources.

8. Be certain that the powder is of the proper type and granulation and measured carefully in a calibrated measuring device to a safe recommended amount.

9. Never load powder into a gun directly from a can, powder horn or flask or similar high volume container. Always use a separate calibrated powder measuring device. A remaining spark or ember in the barrel may cause unintentional ignition of the powder.

10. Be certain that the patches are the correct size and type, and are loaded in their proper sequence and that the projectile is firmly seated on top of the propellant Use only cotton or linen shooting patches when loading round lead balls. Do not use a patch with a sabot. Do not use a sabot with a round ball.

11. No projectiles other than those specifically recommended in this manual should be used in your muzzleloader.

12. Do not take drugs and drink alcoholic beverages before and during shooting. Avoid handling firearms while taking prescription medication which can make you drowsy, slow your reflexes or in any way impare your normal senses or judgement.

13. Always be mindful of where the hammer is set and routinely verify its setting. Never solely rely on any rifle's safety device. It is a mechanical device and as such can malfunction. No mechanical device has yet been devised to totally overcome all the laws of physics. Always treat every gun as if it were loaded and ready to fire. Dropping or a hard blow could, cause the firearm to discharge, resulting in a serious accident or death. Be fully aware of your gun's settings and configuration at all times.

14. Always disable your muzzleloader by carefully removing the percussion cap, or empty the pan of a flintlock. It is always best to unload the gun when not in use.

15. Never install a percussion cap on the nipple of apercussion gun nor put powder in the pan of a flintlock gun before the gun is loaded. When loaded, a bump or an unintentional force could result in the discharge of the firearm resulting in a serious accident.

16. Never leave a loaded gun unattended.

17. Never climb, jump or move abruptly while carrying any loaded firearm.

18. Never transport a loaded gun nor shoot one from within a vehicle.

19. Always store the powder, gun and percussion caps in separate locked places. Always store all firearms and ammunition components in a secured locked compartment and kept well away from children and untrained adults.

20. Never store a loaded gun.

21. In the event of a misfire, assume the gun could fire at any moment. Keep gun pointed upward and down range with the hammer down. Wait at least one minute before recapping, repriming, or removing the load from the barrel.

22. Never load a muzzleloading firearm indoors. Only load your firearm at a location where it is safe to shoot.

23. Be certain that anyone firing this muzzleloader understands and is willing to follow the instructions and precautions in this manual and has fundamental knowledge of safe gun handling.

24. Always make certain that the hammer is securely set in the half-cock position when installing percussion caps, flint or primer powder.

25. Never shoot at a hard or flat surface or into water. Be mindful that a bullet can ricochet off any object it strikes.

4. Insert a pipe cleaner into the bolster/drum fire channel to help remove any residue.

5. Rinse and dry barrel.

C. Cleaning by means of removing the barrel:

Traditions™ barrels are held in place by one of two methods. Select the appropriate procedure for your gun.

1a. For hooked breech models. Remove ramrod. Gently tap barrel tenon wedge(s) through and out of the barrel and stock. Remove barrel from stock by lifting the muzzle end of the barrel upward and out of the stock and pivoting around the breech as you elevate the front of the barrel from the stock. It may require a little force to initially break the barrel free of the stock.

1b. For models that have an integral tang as part of the back of the barrel. Remove ramrod. Carefully tap barrel tenon pins to drive them out the opposite side of the forestock. Take care not to damage the stock. Remove tang screw located at the very back end of the barrel. Lift barrel from stock. Light tapping may be necessary to initially break the barrel free of the stock.

2. An easy procedure is to stand the barrel in a pail of cleaning solution, breech end down. With a cleaning patch on a loading/cleaning jag attached to the end of a ramrod, draw the solution in and out of the barrel by means of a pumping action to create suction.

3. Wipe the exterior surfaces of the barrel and the rest of the gun with a cloth dipped in the same cleaning solution.

4. Rinse the barrel with warm water and immediately dry the barrel.

5. When the gun parts are dry, treat all metal surfaces, including the inside of the lock plate, with a light coating of a rust preventative or gun oil. Reassemble.

Important: Each time the gun is cleaned, be sure to remove both the clean-out screw from the end of the bolster/drum and the nipple. (On flint-lock models remove the touch hole.) Clean the fire channel in the bolster with a pipe cleaner or the like. Reinstall the clean-out screw and nipple (or touch hole). Be sure to always lube the threads of the clean-out screw, nipple or touch hole liner with WonderLube to insure their easy future removal.

6. Store the gun in a cool, dry place which can be securely locked. Storage in a gun case is not recommended. It may retain moisture and hasten corrosion.

7. Very Important: Store all firearms and ammunition separately and out of reach of children.

CLEANING, MAINTENANCE AND CARE

VERY IMPORTANT: Before loading and firing your new Traditions™ gun for the first time, remove the nipple and clean-out screw from the bolster or the touch hole liner from the flintlock and coat the threads of each with Traditions™ WonderLube. This will help in future removal. It is advisable to coat these threads on a regular basis and whenever a new nipple or clean-out screw or touch hole liner is installed

These items are relatively inexpensive. Nipples should be changed frequently and the clean-out screw at least once a year.

Black powder and Pyrodex® are both very corrosive and leave considerable residue in the barrel. For proper shooting, protection and safety, your gun must be cleaned frequently by using the simple methods below.

A. Cleaning during bench or target shooting:

1. After every shot or two, or as soon as you notice any resistance in introducing a projectile down the barrel, place a cleaning patch treated with a commercial black powder solvent on a loading/cleaning jag attached to a ramrod and run it down the barrel a few times to remove the fouling build up. For very fouled barrels, it may be necessary to use more than one patch. Repeat with a clean treated patch one or two times. Follow-up with a dry patch or two to remove any moisture. This is highly advised when shooting saboted ammunition. If saboted ammunition is used always coat the rifling with Traditions™ WonderLube™ for easier loading and tighter groups. This is not necessary when hunting where only one or two shots will be fired.
2. As soon as possible after your firing session is completed, your gun must be thoroughly cleaned. To leave a gun uncleaned, even overnight, can result in serious and damaging corrosion. Following of simple cleaning instructions should be implemented.

B. General cleaning:

Important: Never remove the bolster/drum or breech plug from the barrel. They have been installed at the factory such that they interlock with each other for maximum lock-up strength. Next, a concentric communication hole is drilled into this unit to assure optimum ignition. The removal or alteration of these key parts will compromise the performance of your gun, void your warranty and likely create an unsafe situation.

1. Remove the nipple and clean-out screw from the bolster/drum of a percussion gun or the touch hole liner from a flintlock.
2. Wrap a cleaning patch around a loading jag attached to a ramrod.
3. Pump warm soapy water or a black powder solvent down the muzzle and out the hole(s) in the breech end of the gun.

26. Be sure that all bystanders are safely positioned behind you and that they are aware when you are about to shoot. Anyone near you should also be wearing eye and ear protection.

27. Verify the nipple size on percussion models and be certain that the percussion cap is of the same size.

28. Keep your fingers out of the trigger guard and off the trigger until you are sure of your target and ready to fire.

OBSERVATIONS AND ADJUSTMENTS

For reasons of safety and maximum performance, these loading instructions must be closely followed. They will, with practice, become second nature and will make for safe, dependable and accurate shooting. We recommend you have an experienced black powder shooter with you the first few times you load and shoot.

A. Preliminaries:

1. Wear quality eye and ear protection when loading, shooting and cleaning any gun.

2. Check the nipple on a percussion gun or the flint, jaws and frizzen of flintlock gun, to be sure they are secure. Tighten, if necessary. Take care not to overtighten. Always lubricate threads when installing a nipple. Most Traditions™ percussion rifles and pistols utilize a nipple with M6 x 1 threads. Others may require a different size nipple, if not sure contact us at (800)-526-9556.

B. Determining that the gun is unloaded:

1. Insert the ramrod down the bore of the barrel and mark it at the point where it exits the muzzle. In the event that the ramrod completely enters the barrel, take note of the distance between the end of the ramrod and the muzzle.

Note: Each time this test is done, make certain that he same attachments, if any, are screwed onto the loading end of the ramrod.

2. Remove the ramrod and lay it alongside the barrel.

3. Align the reference mark on the ramrod even with the end of the muzzle. If the gun is unloaded, the other end of the ramrod should be even with the nipple of a percussion gun or touch hole area of a flintlock. If it is significantly higher (2") than that, the barrel is probably either obstructed or loaded. In either case, this situation must be resolved before continuing with the loading and shooting procedures. *(See Removing the projectile and Charge.)*

4. To remove an obstruction, obtain the assistance of an experienced shooter or gunsmith. Do not attempt to clear the barrel by firing.

C. Double-Set Triggers operation:

1. The purpose of double-set triggers is to increase the sensitivity of the front trigger. The front trigger actually fires the gun. Double-set triggers are used during bench, precision target shooting and hunting.
2. Testing double-set triggers: Make certain gun is unloaded and always pointed in a safe direction
   a. With the rifle pointed in a safe direction, place hammer in the half-cock (first click) position. Set (pull) the rear trigger until it clicks into position. With the hammer in the half-cock position, it should be impossible to make the hammer fall by applying pressure on the front trigger or pushing the hammer forward.
   b. Place the hammer in the full-cock (second position). Set the rear trigger. Test that it will stay in this position by attempting to push the hammer forward. With the hammer secure, very light pressure applied to the front trigger will then fire the rifle.

CAUTION: If the lock and triggers do not perform, as in steps "a" and "b" above, do not continue until this problem has been corrected. Follow the instructions under Double-set Trigger Adjustment in this booklet. If further assistance is needed call Traditions Customer Service Dept. Take no chances.

D. Single Trigger Operation:

   a. With the rifle pointed in a safe direction, set the hammer in the half-cock (first click) position. It should not be possible to make the hammer fall from this position even with strong pressure is applied to the trigger or by pushing the hammer forward. If this is not the case, call Traditions™ at 800-526-9556.
   b. Test the full-cock (second click) position to ensure that the hammer will securely stay in this position by attempting to push the hammer forward. Only when moderate pressure is applied to the trigger will fire the gun. In the event the hammer falls when minimal pressure is applied to the trigger (extreme hair trigger), do not continue until this problem has been corrected. Contact Traditions in this case at 800-526-9556.

CAUTION: If the lock does not perform, as in steps "a" and "b" above, do not continue until this problem has been corrected. Contact Traditions at 1-800-526-9556 or follow the instructions under Double-set Trigger Adjustment in this booklet. Take no chances.

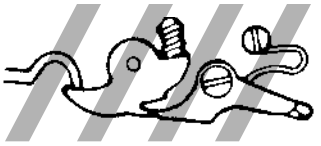
3. Test the operation. If the trigger has insufficient force to make the lock function, turn the screw counterclockwise very gradually until the lock functions. Backing the screw off too far will cause a condition where the lock hammer will not remain in full cock (second position) adjust the trip lever as follows:

LOCK ADJUSTMENT

If the lock of your gun functions properly as described in the Loading and Shooting Instructions, do not attempt to adjust it. If in the rare event adjustment is necessary, carefully make the following adjustments.
An adjustment screw is located on the lock tumbler. Turning this screw clockwise will reduce the engagement of the sear point on the tumbler. *(See diagrams.)*

CAUTION: Be extremely careful that the sear engages fully on the face of the tumbler. If it does not, a dangerous "hair-trigger condition" will exist with the danger of accidental firing. To reduce this danger, turn the adjustment screw counterclockwise to obtain more sear engagement.

PROPER HALF-COCK SEAR POSITION



IMPROPER HALF-COCK SEAR POSITION

PROPER FULL-COCK SEAR POSITION

IMPROPER FULL-COCK SEAR POSITION

Note: Lock Removal Hint

On most models the ramrod retaining spring is attached to the stock by the the lock plate screw closest to the barrel tenon pin or wedge. If that lock plate screw is unscrewed entirely, the spring may become dislodged in the stock. As a preventative measure, partially loosen that lock plate screw. Place a piece of tape over screw head to hold the screw (and ramrod retaining spring) in place. Unscrew the remaining lock plate screw. Remove the lock from the stock.

Note: Take care not to over-tighten the screws or damage to the rear sight may occur.

B. Screw-adjustable metal rear sights:

1. To adjust for elevation, turn the large screw in the center of the sight.

2. To adjust for windage, turn the screw located on the right side of the sight. Turn the screw clockwise or counterclockwise to move the point of impact right or left, respectively.

C. Fixed sights:

1. The windage adjustment can be accomplished by tapping the rear sight in its dovetail with a small piece of wood. Moving the sight to the left, moves the point of impact to the left.

2. Elevation adjustment can be accomplished by filing off the top of the front sight to move the point of impact higher or deepening the slot in the rear sight to move it lower.

DOUBLE-SET TRIGGER ADJUSTMENT

Many Traditions™ guns have double-set triggers. These are adjusted at the factory and will usually perform adequately without further adjustment. Any adjustment should be done carefully

Tightening the small screw between the triggers reduces the pull weight needed to actuate the trigger. For any adjustment, first make sure the gun is unloaded then remove the trigger guard (and with the trigger area facing you) proceed as follows:

1. Place the hammer in full-cock (second position).

2. Cock the rear trigger.

3. Turn screw between the triggers clockwise until the trigger "fires."

4. Turn screw one or more full turns counterclockwise.

CAUTION: To turn the screw less than one full turn counterclockwise will create a dangerous situation called a "hair trigger".

There is a second adjustment screw just behind the rear trigger. The position of this screw regulates the force of the trigger "trip lever" and its height. This is adjusted at the factory. If the lock hammer does not remain in full cock (second position), adjust the trip lever as follows:

1. Set the rear trigger.

2. Turn the small screw clockwise until it stops. Then back the screw off one-half turn counterclockwise.

E. Cleaning all excess oil, grease and moisture from within the barrel before the initial loading.

For percussion models:

Method 1. Make sure the rifle is unloaded. Place a properly sized percussion cap on the nipple and set the hammer on full-cock. Point the muzzle of the gun an inch or two from a leaf, blade of grass or any other lightweight object on the ground and fire two or three percussion caps. This will help to clear any residue out of the nipple and ignition channel and if by firing the cap the object is moved, the barrel is clear of obstruction. Fire two additional caps to blow out any remaining oil or moisture. The gun is now ready for loading.

CAUTION: When performing this test be mindful to always point the barrel in a safe direction and not towards any hard surface. Treat every gun as if it were always loaded and can fire at any time. Make sure the gun is unloaded by the procedure outlined previously in Section B.

Method 2. Make sure the rifle is unloaded. Place a clean cleaning patch on the cleaning jag end of a ramrod. Insert the ramrod with clean white patch attached. Point the gun, with ramrod fully inserted, in a safe direction and fire a percussion cap. Remove ramrod. Observe amount of residue on the patch. Reinsert the ramrod with clean patch. Repeat this procedure until the patch comes out relatively free of oil and moisture.

For flint-lock models:

Unfortunately no similar cleaning procedure exists for a flint-lock model. It is best to wipe the interior of the barrel with a progressive series of cleaning patches afixed to the cleaning jag end of a ramrod until as much of the oil and moisture as possible has been removed.

F. Position for loading:

1. **Rifle** - Stand the rifle, butt end down, on the ground between your legs with the muzzle pointed upward and out away from you. It helps to have a shooting table against which to rest the rifle.
2. **Pistol** - Either stand the pistol on a loading stand or kneel on the ground holding the pistol between your knees.

CAUTION: With either a rifle or a pistol, never work with your face or any part of your body over the muzzle, even when the gun is believed to be unloaded. Always keep the muzzle of the gun pointed upward and downrange.

G. Loading the powder *(See Recommended Loads.):*

1. Use only black powder or Pyrodex® as explained in the Recommended Loads in this booklet. Using a convenient powder flask or

powder horn, fill a calibrated powder measure to desired amount. Do not exceed Recommended Loads. It is not safe and will decrease your accuracy.

2. Pour the powder from the powder measure into the barrel, and with the palm of your hand, slap the sides of the barrel to ensure that all the powder falls to the bottom of the barrel and some has entered the bolster or touch hole area for optimum ignition.

CAUTION: NEVER LOAD POWDER DIRECTLY from any container, flask or powder horn into the barrel. A spark from a previous firing could ignite thepowder entering the barrel and cause the container in your hand to explode.

Note: Preformed Pyrodex® Pellets generally work best in in-line rifles and were not designed for guns with side-lock ignition. Traditions™ Thunder Magnum™ rifle is an exception to this in that its ignition channel directs the spark to the rear of the propellant load so that the shooter can utilize pellets.

H. Loading the projectile *(See Recommended Loads.):*

1. For Patched Round Balls: Lubricate one side of a shooting patch with Traditions™ WonderLube or use the convenient pre-lubed Traditions™ WonderLube Shooting Patches. Center the patch on top of the muzzle, lubed side down. Place the ball in the center of the patch. If the ball has a dimple "sprue," face it upward.

   a. Using a ball starter, place the short shaft on top of the ball and apply pressure to drive the ball downward into the muzzle. With a sharp knife cut away any of the patch remaining outside the barrel. (This is unnecessary if round precut patches are used.) With the longer shaft of the ball starter, drive the ball deeper into the barrel.

   b. Place the ramrod on top of the ball and grasp it no more than 8 inches above the muzzle. (Any greater distance could result in breaking the ramrod and injury to your hand.) Apply moderate pressure and push the ball down into the barrel in 8 inch increments. Be sure to firmly seat the ball on top of the powder

WARNING: Any air gap between powder and ball is a potentially dangerous situation that could cause a burst barrel with death or bodily injury resulting.

2. For Conical lead bullets: Lubricate the sides of the projectile with Traditions™ WonderLube. Place the projectile into the barrel and use the ball starter and ramrod procedure as described earlier in Section H1 to install and seat the projectile. Do not use patches with these bullets. Patches are for round balls only.

3. Sabots can be used in side-lock guns. They will perform differently than patched round balls or conical bullets. It will be necessary to experiment with them to become familiar with their performance.

oil or moisture in the barrel and the propellant got damp. In either case, the projectile will have to be removed. At this point, the beginning shooter should ask for the help of an experienced shooter with the proper tools. The safest procedures for accomplishing this is as follows:

REMOVING THE PROJECTILE AND THE CHARGE

Method 1.

Use Traditions™ convenient CO2 powered EZUnloaderTM, fitted with the proper adapter for your model gun, to force the load out of the barrel. This and other Traditions™ shooting accessories are available in most retail gun stores.

Method 2

Place hammer in half-cock position. With the muzzle pointed in a safe direction, remove the barrel from the stock. With the nipple and clean-out screw removed from percussion models or the touch hole liner removed from flintlock models, submerge the breech end of the barrel in about 10 inches of water for 20 minutes. Then screw a bullet/ball puller onto the threaded end of the ramrod. Insert the ramrod into the barrel and forcefully screw the bullet/ball puller into the projectile and carefully pull it out. Flush out the powder. Then clean the barrel, as described in the Cleaning, Maintenance and Care section of this booklet. Note: After powder dries it will once again be volatile. Handle it with care.

SIGHT ADJUSTMENT

3 Ways

A. Polymer rear sight adjustment:

1. To adjust for elevation, loosen the screw found on the right side of the rear sight. To raise the bullet's point of impact, slide the upper portion of the sight forward (up the ramp). To lower the bullet's point of impact, slide the sight to the rear (down the ramp). Tighten the screw to lock sight in place.

2. To adjust for windage, loosen the small screw found on the top of the rear sight and just forward of the "V" notch. Slide the "V" notch to the left to move the bullet's impact point left, or to the right to move the bullet's impact point to the right. Tighten the screw to lock into place.

2. After this interval, place the hammer at half-cock with the gun pointed in a safe direction, remove the percussion cap from the nipple and insert a nipple pick or fine wire deeply into the hole of the nipple to ensure that the hole is not clogged. Slap the barrel on the lock side to force powder into nipple area.

3. Place another percussion cap on the nipple, set hammer on full-cock and with the gun pointed in a safe direction attempt to fire again.

4. If ignition still does not result, wait another minute, and with the gun pointed in a safe direction, set hammer at full-cock and remove the fired percussion cap then remove the nipple.

5. Introduce a small amount of powder into the nipple hole by slapping the left side of the gun with the palm of your hand in attempt to induce the powder as far into the barrel as possible.

6. Reinstall the nipple.

7. Set hammer at half-cock.

8. Install a new percussion cap on the nipple, set the hammer on full-cock and with the gun pointed in a safe direction attempt to fire again.

N. Misfire - Flintlock Models

(Spark ignites primary charge in the pan but main charge does not ignite):

1. Keep the barrel pointed upward and toward your target. Wait at least one minute. By doing so, you will make sure you are prepared for the chance of a delayed ignition, also called "hangfire".

2. After this interval, set the hammer at half-cock and, with the gun pointed in a safe direction, tip the frizzen forward to expose the pan.

3. Insert a nipple pick or fine wire through the touch hole in the side of the barrel to ensure that the ignition channel is not blocked.

4. With the palm of your hand, slap the lock side of the gun in an to attempt to induce the powder to be as close to the pan as possible.

5. Recharge the pan with 4fg powder.

6. Close the frizzen, set hammer on full-cock and attempt to fire again.

Note: Given their level of technology, a misfire is more prevalent with flintlock models than with percussion models. Two or three attempts may be necessary to ignite a stubborn load. Also, flints and frizzens do wear out over time and should be replaced.

Note: If the above techniques do not work, the charge must be removed from the barrel. First use the ramrod marking test to first see if powder was indeed installed before the projectile. If the muzzle is positioned between the unloaded and loaded marks on the ramrod, it may be that powder was not installed before the projectile. Another possibility is that there was too much

Note: Given that sabots are inserted dry, it is advised that the bore of the barrel be cleaned between shots with a WonderLube treated cleaning patch and that the rifling in the barrel be left with a moderate coating of lubricant for ease of loading and optimum accuracy. Do not use patches with sabots.

CAUTION: It is very important that the projectile be of the correct caliber and fit. The fit must be snug and require moderate pressure to seat on top of the powder. A loose fit could cause the projectile to separate from the powder charge, particularly if the gun is subjected to any jarring or sharp movement.

I. Marking the ramrod to indicate a loaded barrel:

1. With powder and projectile properly and firmly loaded into the barrel, insert the ramrod into the barrel and mark it at the point where the ramrod exits the muzzle. In the future, this mark will serve to indicate that the barrel is loaded. Be sure that each time you measure, the ramrod has the same accessory tip attached, if any.

Note: You should now have two marks on your ramrod. One to indicate that the barrel is unloaded and one to indicate when the barrel is loaded. These are very important reference marks that will prove valuable in the future.

J. Capping *(priming)* and cocking:

1a. Percussion models: With the gun pointed in a safe direction, upward and down range, move the hammer to the half-cock position and place a percussion cap of the proper size on the nipple.

1b. Flintlock models: Tilt frizzen (striker) forward to expose the pan and fill the pan with 4f powder. Close the frizzen.

2. With the gun pointed in the same safe direction, movethe hammer to the full-cock position.

CAUTION: The gun is now ready to fire! Any pressure applied to the trigger will fire the gun. Be sure to always point the gun in a safe direction. Proceed cautiously!

K. Take careful aim. Fire!

L. After firing,

Wait at least one minute before reloading to ensure that no spark or smoldering ember remains in the barrel that could possibly ignite fresh powder.

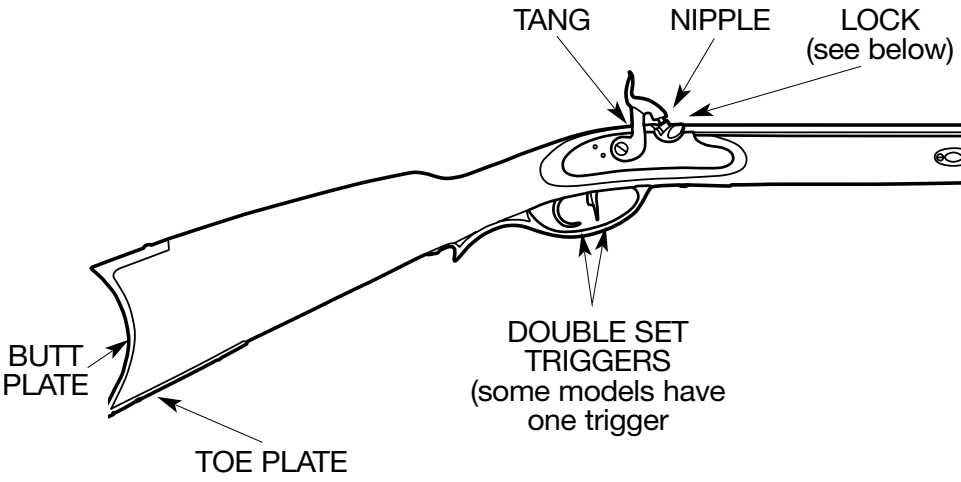
M. Misfire - Percussion models

(when the powder charge, does not ignite.)

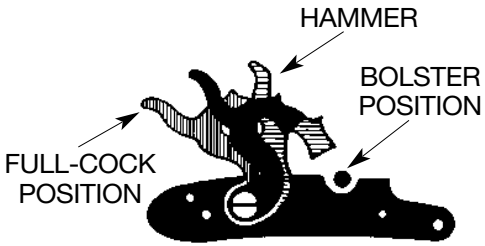
If this occurs:

1. Keep the barrel pointed upward and toward your target. Wait at least one minute. By doing so, this will make sure you are prepared for the chance of delayed ignition, also called “hangfire”.

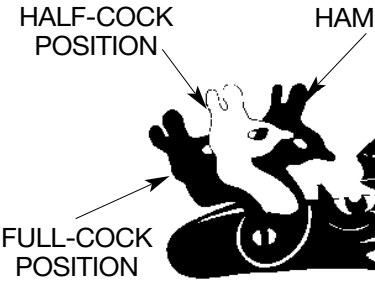
BASIC MUZZLELOAD



BASIC LOCK T

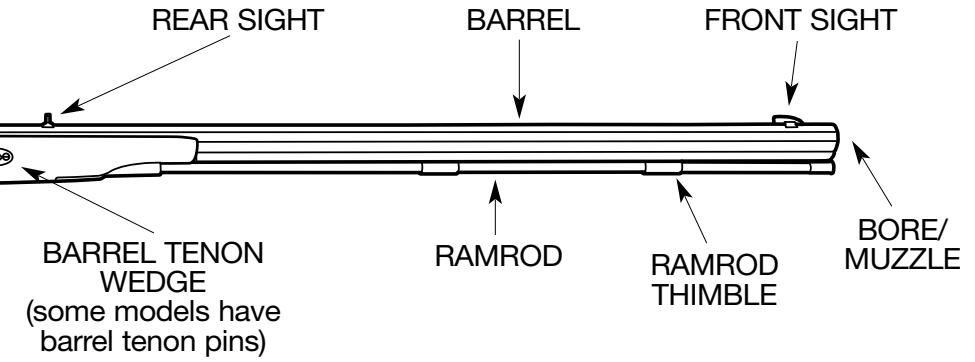


Percussion: External Lock Parts



Flintlock: Extern

DING TERMINOLOGY



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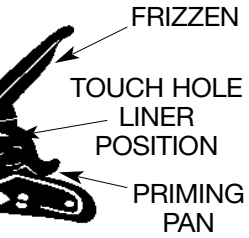

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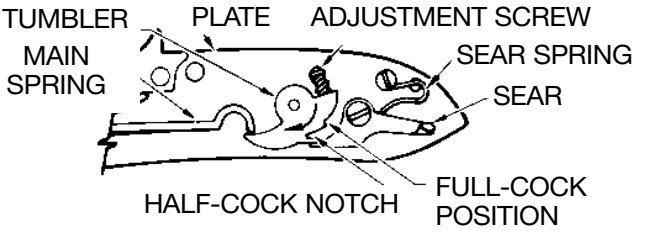

Internal Lock Parts